

Patent
Serial No. 10/798,477
Agilent Docket No. 70030733-1

REMARKS

Remaining Claims

Claims 1 and 8 have been amended herein. Twenty (20) claims (claims 1-20) remain pending in this application through this Amendment. Applicants respectfully request further examination of the application in view of the amendments and remarks.

Objection to Drawings

The Examiner objects to the drawings because reference numeral "250" in Figure 2 is not mentioned in the written specification. Applicants have amended paragraph 12 to correct this informality.

The Examiner also objects to the drawings because elements recited in claim 14 are not explicitly shown in the plural form recited in claim 14. Applicants respectfully submit that Figure 2 adequately illustrates what is recited in claim 14, even though Figure 2 is labeled "prior art," because the differences between what is shown in Figure 2 and the invention as recited in claim 14 are a matter of internal structure, illustrated in other drawing figures, that would not be visible in an exterior perspective view such as that of Figure 2. In other words, an embodiment of the invention as set forth in claim 14 would have the same outward appearance as prior devices having multiple LEDs, multiple cavities, etc., illustrated in Figure 2. Therefore, Figure 2 is believed to adequately illustrate such a structure for both purposes.

If the Examiner reiterates the objection, Applicants would be amenable to adding a drawing figure that is identical to Figure 2 but not labeled "prior art," with the implicit understanding that the internal structure of the illustrated device is the novel structure described and shown elsewhere in the specification and drawings. Nevertheless, Applicants respectfully believe that such an additional drawing figure would be superfluous and potentially confusing.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of this objection.

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Rejection of Claims 1-20 under 35 USC §102(e) – Reeh

Claims 1-20 stand rejected under 35 U.S.C. §102(e) as being anticipated by *Reeh* (U.S. Patent No. 6,576,930 to Reeh, et al.). Applicants have amended claims 1 and 8 but otherwise respectfully traverse the rejection.

With regard to independent claim 1, *Reeh* discloses a system that emits polychromatic light by combining the light emitted directly from the LED with light emitted from the LED and converted to a second wavelength by the conversion element (overlay). (See, e.g., Abstract.) In contrast, in accordance with one feature of Applicants' invention, monochromatic light can be emitted by selecting a combination of LED and fluorescent material overlay that ensures substantially all of the light emitted by the LED is converted to another wavelength. Applicants have amended claim 1 to emphasize this feature of the invention. Support for this amendment is found in, for example, the 18th paragraph of the specification, beginning at page 4, line 16 as originally filed. This feature is neither taught nor suggested in *Reeh*. For at least this reason, Applicants believe claim 1 and claims 2-7, which depend from claim 1, are not anticipated by *Reeh*.

With regard to independent claim 8, *Reeh* does not teach or suggest that only a portion of the overlay layer can contain light-converting fluorescent material. Applicants have amended claim 8 to emphasize this feature of the invention, support for which can be found in, for example, the 23rd paragraph of the specification, beginning at page 5, line 32 as originally filed: "Also, the area of fluorescent material in the overlay 360 may be shaped such that only a portion of the overlay includes fluorescent material." In other words, some of the area of an overlay can have the fluorescent material, while the rest of the area does not. In this manner, patterns or other designs within a single, unitary overlay can be created. This feature is neither taught nor suggested in *Reeh*. For at least this reason, Applicants believe claim 8 and claims 9-13, which depend from claim 8, are not anticipated by *Reeh*.

With regard to independent claim 14, *Reeh* does not teach or suggest a plurality of cavities, each with an LED, an overlay, electrical connections, etc. For example, Applicants' novel overlay can be used on each segment of a multi-

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segment numeric or alphanumeric display. (An example of a prior type of such a multi-segment display is shown in Fig. 2.) The Examiner points to Figure 3 of *Reeh* as showing a plurality of cavities and corresponding LEDs, but Applicants believe only a single cavity ("9") and a single LED ("1") are shown and described. For at least this reason, Applicants believe claim 14 and claims 15-20, which depend from claim 14, are not anticipated by *Reeh*.

In addition, with regard to claim 20, Applicants respectfully disagree that *Reeh* shows each of a plurality of cavities having an overlay with a different type of fluorescent material. The Examiner points to col. 4, lines 53-62 of *Reeh*, but Applicants respectfully submit that the cited section does not teach or suggest this feature. Rather, the cited section describes one embodiment in which the mixture of luminescent materials that determines the hue of emitted light, and another embodiment in which the luminescent material is "inhomogeneously distributed." The latter embodiment is apparently intended to compensate for differences in path length that light emitted from different portions of the device must travel: "Different path lengths of the light through the luminescence conversion element can advantageously be compensated for as a result of this."


In contrast, in Applicants' invention as it is set forth in claim 20, where there are a plurality of cavities, each can have an overlay with a fluorescent material type that causes it to emit a color or wavelength different from that of the other cavities. For example, there can be a multi-segment display in which each segment emits a different color. Nowhere in *Reeh* is such a feature taught or suggested. Moreover, as discussed above, *Reeh* does not even disclose a device having such a plurality of cavities. For at least this additional reason, Applicants believe claim 20 is not anticipated by *Reeh*.

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CONCLUSION

For the reasons set forth above, it is respectfully submitted that all grounds of rejection and objection have been overcome and/or traversed and that all pending claims are now in condition for allowance. Should there be any further questions or concerns, the Examiner is urged to telephone the undersigned.

Respectfully submitted,
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